

FIVE NEW SPECIES OF AUSTRALIAN DRYOPIDAE.

By H. J. CARTER and E. H. ZECK.

(Plate xi.)

NOTRIOLUS DAVIDSONI n.sp.

Oblong-ovate, nitid black, elytra with small shoulder spot white, tarsi and basal segments of antennae red, underside black, glabrous.

Head and *prothorax* finely and densely punctate.

Prothorax widest behind middle, the usual convexity at apex, anterior angles subacute, base subtruncate, sides lightly rounded, lateral foliation narrow at middle, widening in front and behind.

Scutellum round, large, and apparently impunctate.

Elytra lightly obovate, a narrow horizontal border throughout, minutely denticulate at extreme margins, disc evenly and lightly convex, striate-punctate, the seriate punctures large and round, increasing in size towards sides, intervals flat near suture, with some minute pustules, intervals from fifth outwards with narrowly raised ridge bordering the striae, these ridges containing small pustules more or less connected. Prosternum finely punctate, its process wide, rounded at apex. Meso- and metasternum with larger and less regular punctures than on prosternum, abdomen minutely punctate. Fore tibiae with line of tomentum on inside.

Dimensions: 4.2 x 1.8 mm.

Habitat: N.S.W., Shoalhaven River. (H. Davidson.)

Two examples given me by their captor show a rather large species, in colour near *N. humeralis*, C. & Z., but differing as follows:—Surface less polished, sides of prothorax more evenly and lightly rounded. (In *humeralis* subangulately rounded.) Elytra with seriate punctures much larger, the lateral intervals narrowly raised (flat in *humeralis*). Holotype in Coll. Carter.

NOTRIOLUS SETOSUS n.sp.

Dark brown, antennae and tarsi red, underside black, abdomen with reddish pile.

Head punctate setose, eyes large, scarcely prominent.

Prothorax convex and roundly produced in middle of apex, front angles a little advanced but rounded off, widest behind middle, sides lightly rounded, with well defined horizontal foliation, base rather strongly bisinuate, the medial part with a further hollow for the reception of the scutellum, hind angles rectangular. Disk evenly and rather closely punctate, with short, fine, pale setae, especially at sides and base; near each hind angle a short, wide, subcostate elevation.

Scutellum large, round, elevated, nitid, with a few punctures.

Elytra lightly obovate, a narrow horizontal margin obsolescent towards apex; striate-punctate, the striae with series of large punctures, intervals clearly convex, everywhere with short, pale setae.

Prosternum coarsely and closely punctate, its process widely rounded at apex. Meso- and metasternum coarsely rugose punctate, abdomen finely punctate with short adpressed hairs. Front tarsi with a line of tomentum on inside.

Dimensions: 3.6 x 1.6 mm.

Habitat: N.S.W., Duckmolloi River, Oberon district. (A. E. Church.)

A single example was taken from the stomach of a trout during the investigation by Mr. K. C. McKeown, of the Australian Museum. It is

readily distinguished from its allies by colour, clothing, and the convex elytral intervals, besides the unusual elevation near the hind angles of the pronotum. This species has the sternal process and narrow head of a *Simsonia*, though without the characteristic pronotal transverse sulcus of that genus. It may be termed a "borderline" species. Holotype in the Australian Museum.

NOTRIOLUS TAYLORI n.sp.

Widely ovate, very nitid black above, elytra with two humeral and two subapical spots yellow, underside nitid dark castaneous, glabrous, tarsi and basal half of antennae red, apical half of antennae infusate.

Head and *prothorax* very finely and closely punctate, eyes not prominent.

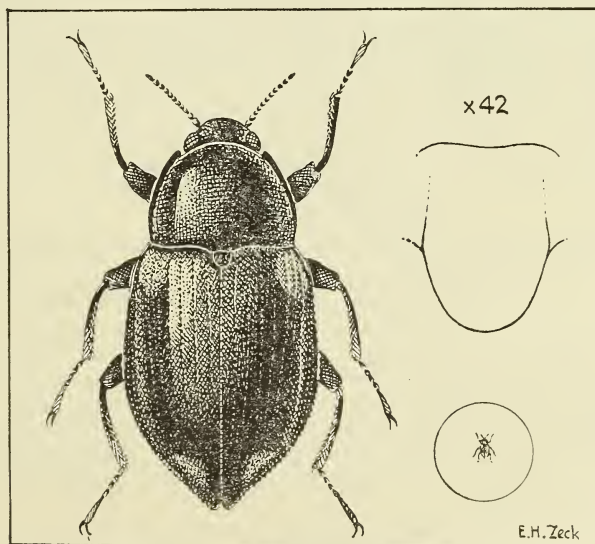
Prothorax widest behind middle, apex and base bisinuate, hind angles subrectangular, sides very lightly and arcuately narrowed to apex, margins narrowly explanate, but widened at all the angles, basal region flattened and limited by a light sulcus; this area with larger punctures than rest; disc with small shallow depression in middle.

Scutellum longitudinally elliptic, punctate.

Elytra widely obovate, sinuately narrowed towards apex; a narrow horizontal margin, continuous to apex, serrulate near apices, these separately rounded; striate-punctate, seriate punctures regular, round and shallow; intervals flat and closely punctate.

Prosternum concave, coarsely punctate, its process wide, truncate at apex, its raised sides forming with apex 3 sides of an incomplete hexagon; metasternum with large, round punctures, abdomen almost impunctate.

Dimensions: 2.7 x 1.3 mm. (approx.).



Notriolus taylori n.sp.
Sternal process, x 42.

Habitat: North Queensland, Ravenshoe and Glen Allyn. (Mr. F. H. Taylor.)

Nine examples examined show a species nearest to *N. subplanatus* (C. & Z.) in form, but the flattened disc of the pronotum is less obvious, and the elytral intervals are more strongly punctate. It is readily distinguished from the other spotted species by its flat, wide form. We gladly dedicate it to its captor, entomologist of the Institute of Tropical Medicine, University of Sydney. Holotype in Coll. Carter.

SIMSONIA TONNOIRI n.sp.

Elongate-ovate, nitid black, antennae (partly) and tibiae dark red, tarsi and apical segments of antennae infuscate.

Head clearly punctate.

Prothorax with usual hood-like apex, anterior angles deflexed, unseen from above, base truncate, sides subsinuate in front, posterior angles rectangular; disc bilobed, the anterior lobe defined behind by arcuate depression extending from the anterior angles to near half way, posterior lobe with a short, well-defined carina at base near each angle, surface of disc uneven, with irregular, sparse, coarse punctures (less coarse on anterior lobe).

Elytra wider than prothorax, seriate (scarcely striate) punctate, the seriate punctures round and unusually large; intervals flat, each with a single row of minute, distant punctures.

Metasternum coarsely rugose-punctate.

Dimensions: 3 mm. long.

Habitat: Mount Kosciusko, Pretty Point Creek. (A. L. Tonnoir.)

Mr. Tonnoir recently took 3 examples, amongst other Dryopidae in December, 1931. The species can easily be distinguished by its evident baso-sublateral carinae, and uneven and exceptionally coarsely punctate surface. The underside of the specimen examined is very dirty and difficult to see, but the metasternum is coarsely punctate with elongate rugosity. Holotype in the Museum of The Council of Scientific Research, Canberra.

The other species taken at the same time and place were *Simsonia nicholsoni* Cart., *S. nicholsoni* var. *bicolor* Cart., *S. wilsoni* Cart., *Kingolus aeratus* Cart.

Also one example of *Octhebius* sp.

SIMSONIA ALLMANI n.sp.

Oblong-ovate, dark purplish bronze above and beneath, head and pronotum nitid, elytra opaque.

Head, eyes large, not prominent, front lightly punctate.

Prothorax roundly produced over head, anterior angles emarginate, acute, base subtruncate; widest behind middle, sides rounded behind, sinuately narrowed to apex, posterior angles a little obtuse; with narrow lateral foliation, disc bilobate, the separating sulcus wide and arcuate, disc strongly punctate, the punctures large, deep and sparsely distributed; near each hind angle a short well-defined carina, these carinae connected by a wide transverse sulcus, partly interrupted in the middle; some smooth spaces in middle of disc.

Scutellum large, nitid and laevigate.

Elytra wider than prothorax at base, sides very slightly widening to beyond middle, thence sharply narrowed to apex. Striate-punctate, the striae shallow, the strial punctures vaguely defined, except towards sides,

intervals flat and everywhere finely transversely strigose, giving the opaque surface.

Tibiae very stout, the interior edges straight and strongly fringed with tomentum, the exterior outline arched and pustulose.

Dimensions: 2.3 x 1 mm.

Habitat: N.S.W., Tarana, Fish River. (S. L. Allman.)

A single example is named after its discoverer, Mr. Allman, of the New South Wales Department of Agriculture. It is abundantly distinct from allies by its curious sculpture and the marked opacity of the elytral surface, due to the fine cross wrinkles of the flat intervals. The species form a link between *Simsonia* and *Kingolus* in the pronotal sculpture, but the tarsal claws are those of a *Simsonia*. Holotype in Coll. Carter.

EXPLANATION OF PLATE XI.

1. *Notriolus davidsoni*.
2. *Notriolus setosus*.
3. *Simsonia tonnoiri*.
4. *Simsonia allmani*.
5. Sternal process of *Notriolus setosus*, x 42.
6. Sternal process of *Notriolus davidsoni*, x 42.
7. Sternal process of *Simsonia tonnoiri*, x 42.
8. Sternal process of *Simsonia allmani*, x 42.

ERRATA.

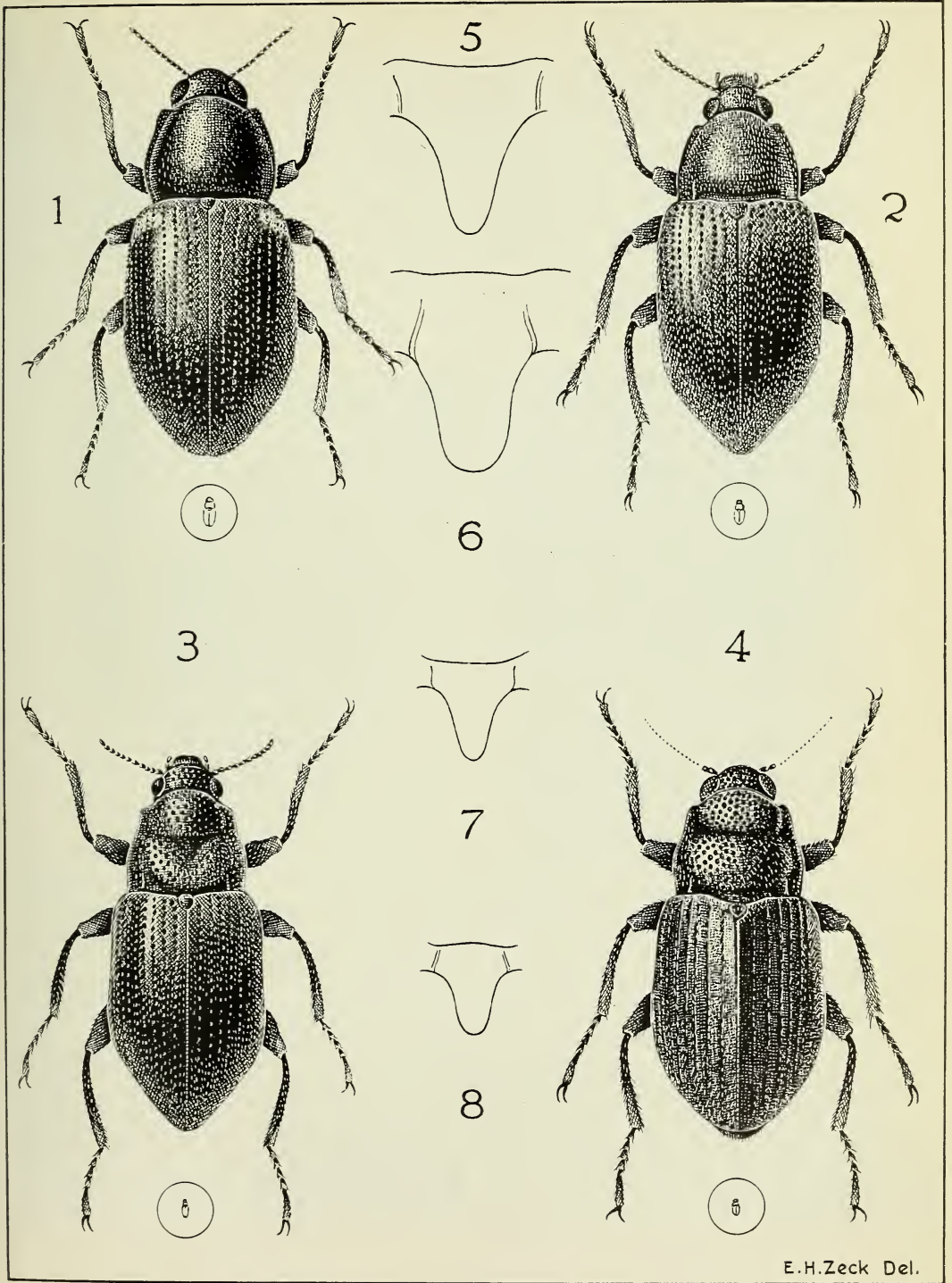
In our Monograph of the Australian Dryopidae there is an erroneous transposition of a line. On p. 53, line 6, the words "parallel to the sides and more or less carinate on its external edge" should follow the words "transverse depression" in line 8. The phrase applies to the sublateral sulcus, but as printed applies to the transverse depression, which is nonsense.

Also p. 54, line 2 of the *Kingolus* table read "Bicolorous" for "Unicolorous".

„ p. 59, line 5 read "middle" or "suture".

„ p. 63. The omitted dimensions of *Austrolimnius luridus* are:
1.2 x 0.6—1.4 x 0.7 mm.

In the Aust. Zool., Vol. VIII., pt. ii., 1935, 79, *Simsonia eborica* is misnamed *Simsonia eborensis* in the explanation of plate.



E.H.Zeck Del.